AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

LISTING OF CLAIMS:

1. (Currently amended) A plasma etching apparatus for etching an organic film, comprising:

a semiconductor ring disposed on an outer circumference of a substrate to be processed, and having a bias voltage applied to the ring;

a resin layer formed of a carbon material disposed on an inner wall surface of a processing chamber; and

a source of an additive gas containing carbon, to be added to an etching gas supplied to the processing chamber.

2. (Cancelled).

3. (Currently amended) The plasma etching apparatus according to claim 1, wherein the additive gas is a carbon monoxide (CO) gas ~~is added to an etching gas~~.

4. (Currently amended) The plasma etching apparatus according to claim 1, wherein the additive gas is a methane (CH_4) gas diluted with an argon (Ar) gas ~~is added to an etching gas~~.

5. (Original) The plasma etching apparatus according to claim 1, wherein at least either a material or a size of a susceptor member disposed between said

ring and an electrode is adjusted according to an area to be etched on said substrate to be processed.

6. (Currently amended) A plasma etching method for etching an organic film, comprising:

disposing a semiconductor ring on an outer circumference of a substrate to be processed, applying a bias voltage to the ring, and controlling the bias voltage being applied, thereby controlling the degree of deposition of silicon-based reaction products on the surface of the ring;

disposing a resin layer formed of a carbon material on an inner wall surface of a processing chamber; and

adding an additive gas containing carbon to an etching gas.

7. - 8. (Cancelled).

9. (New) The plasma etching method according to claim 6, wherein said additive gas is a carbon monoxide (CO) gas.

10. (New) The plasma etching method according to claim 9, wherein a flow ratio of said etching gas to said additive gas is 2.5 to 1.

11. (New) The plasma etching method according to claim 6, wherein said additive gas is a methane (CH_4) gas diluted with an argon (Ar) gas.

12. (New) The plasma etching method according to claim 11, wherein a flow ratio of the etching gas to the additive gas is 1 to 3.

13. (New) The plasma etching apparatus according to claim 3, wherein a flow ratio of the etching gas to the additive gas is 2.5 to 1.

14. (New) The plasma etching apparatus according to claim 3, further comprising structure to control flow of the etching gas and the additive gas such that a flow ratio of the etching gas to the additive gas is 2.5 to 1.

15. (New) The plasma etching apparatus according to claim 4, wherein a flow ratio of the etching gas to the additive gas is 1 to 3.

16. (New) The plasma etching apparatus according to claim 4, further comprising structure to control flow of the etching gas and of the additive gas such that a flow ratio of the etching gas to the additive gas is 1 to 3.

17. (New) The plasma etching apparatus according to claim 1, wherein said semiconductor ring is made of silicon material.

18. (New) The plasma etching apparatus according to claim 1, wherein said semiconductor ring is disposed, and said bias voltage applied thereto, such that silicon-based plasma products generated in a plasma process using the plasma etching apparatus can be deposited stably on the ring.

19. (New) The plasma etching method according to claim 6, wherein during the method silicon-containing components are generated, and bond to carbon of at least one of the additive gas and the resin layer and are evacuated from the processing chamber.

20. (New) The plasma etching apparatus according to claim 1, wherein the resin layer and the additive gas are provided such that during operation of the apparatus for an etching process, wherein silicon-containing components are generated, the generated silicon-containing components bond to carbon of at least one of the additive gas and the resin layer and are evacuated from the processing chamber.